

Gemstone Constellations



Jeroy Nelson

Overview

Objective – Explore the Navajo story of First Man and First Woman creating the Navajo star patterns *Nahookos Bik'a'ii*, *Nahookos Bi'aadii*, and *Nahookos Bikq* (Big Dipper, Cassiopeia, and the North Star).

Age Range – This activity is designed for elementary and middle school aged children.

Materials Needed – Different colors of construction paper, or other brightly colored papers; small white poster boards, or a roll of white butcher paper; scissors; scotch tape; glue; crayons, markers, and/or colored pencils; star pattern guides (provided); background information (provided). An option is to work with other materials like fabric, paint, or star stickers to create and place the “gemstones” on the “buckskin.”

Set Up – Use one or two tables with chairs. You may wish to make copies of the star pattern guides and display them on the tables. Spread the colored paper and crayons around for easy access.

Estimated Time – 30 – 45 minutes; approximately one class period if used in a classroom.

Facilitator or Teacher Pre-Work – Read the Navajo story *So Diyin Dine'e*, and have a copy of it on hand to read aloud. Pre-make all the gemstones needed to make a sample layout of the star patterns on the buckskin. Do not glue the gemstones onto the buckskin, so you can mimic placing them onto it as you read along in the story.

How To

Guidelines for Facilitating the Activity

Assemble a group and ask what they know about how the star patterns and constellations came to be in the sky. Ask what they know of *Nahookos Bik'a'ii*, *Nahookos Bi'aadii*, and *Nahookos Bikq*. Read the story aloud, and as you go along, lay out the poster board or piece of butcher paper as if it were the buckskin in the story. Using your pre-made gemstones, mimic the placement of them onto the buckskin at the appropriate point in the story. Then, present each person with a buckskin (poster board or piece of butcher paper) of their own.

Demonstrate how to tear off or cut a piece of colored paper and make it into a “gemstone.” They will each make 7 gemstones of varying size, shape, and color for *Nahookos Bik'a'ii*, 5 for *Nahookos Bi'aadii*, and 1 or more for *Nahookos Bikq* (see the provided guides). They will place them, with tape or glue, in the patterns according to the provided guides. Encourage the kids to make drawings around the gemstones on the poster board – images perhaps that represent concepts associated with each star pattern, or whatever else they desire. If working in a Community Event, encourage parents and other family members to interact. The facilitator for this activity should be fluent in communicating with young children. The children should take home their creations.



Community Night Event – Field Test in Cameron, AZ

Background

NAVAJO STORY

An Excerpt From:
Só Diyin Dine'é

Told by Irvin K. James, 2001
Transcribed by Sylvia Jackson

Produced by the Office of Diné Culture, Language, and Community Services
Division of Diné Education

The Holy Ones discussed the growing process, as they observed and understood it. If all living things return to the Earth and are replaced with new life, then there is a growing process in place. The Holy Ones met, discussed, planned, and laid out the constellations by which the People will understand the passage of time, growing, and aging.

One day was set aside for everyone to participate. Haashch'eeeyalti'i placed a flawless buckskin on the ground. Other Holy Ones brought precious gems of all colors, sizes, and shapes to produce specific patterns and designs to depict their character and ability. First man constructed a pattern he called Nahookos Bik'a'ii, the Big Dipper. He chose seven colorful stones in the pattern. First Woman constructed a pattern she called Nahookos Bi'aadii, Cassiopeia, and had five stones in the pattern. They placed the patterns in the northern sky around the North Star, with their own fire hearth between them. The pair will revolve around their fire hearth, Nahookos Bikq, the North Star. Everyone was satisfied with the arrangements.

The constellation patterns placed in the sky were discussed and designed for specific purposes such as the Nahookos Bik'a'ii and the Nahookos Bi'aadii and the fire hearth, Nahookos Bikq. The pattern exhibits changes of the season. In the early spring, Nahookos Bi'aadii will be visible in the northeastern sky. Nahookos Bik'a'ii will be visible in the same location in the early fall evening. Nahookos Bikq, the North Star, remains in one location all the time. All constellations revolve around the North Star.

The traditional understanding is that the constellation patterns depict proper roles and responsibilities of families. Nahookos Bik'a'ii reigns over the fall and winter seasonal activities for the People. Ye'i'ii Bichei and ilnashjinji hataal are winter healing ceremonies. Nidaa and Hozhonjii Hataal are the spring and summer healing ceremonies under the reign of Nahookos Bi'aadii. Being aware of the purposes of the constellations helps in understanding the traditional practices of Diné Way of Life.

Graphics

The following several pages contain the provided graphics for this activity: the three star pattern guides as black line masters which can be photocopied and displayed while conducting the activity.







